

November 27, 2018



U.S. Department
of Transportation

East Building, PHH – 30
1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 7026
(SIXTEENTH REVISION)

EXPIRATION DATE: 2022-09-30

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Kidde Aerospace & Defense
Wilson, North Carolina
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale and use of non-DOT specification welded stainless steel cylinders conforming with DOT specification 4DS except for maximum charging pressure, material of construction, testing requirements and marking. The cylinders are authorized for the transportation in commerce of a Division 2.2 material. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304a(a)(1) in that non-DOT specification cylinders are not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Kidde Aerospace & Defense dated October 19, 2018, submitted in accordance with § 107.109.

November 27, 2018

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Compressed gas, n.o.s. (Mixture of bromotrifluoromethane and nitrogen)	2.2	UN1956	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Packaging prescribed is a non-DOT specification welded stainless steel cylinder having 2,500 cubic inch maximum water capacity and a 1,400 psi maximum service pressure manufactured in compliance with DOT Specification 4DS (§§ 178.35 and 178.47) except as follows:

§ 178.35(f)(1)(i) Each cylinder must be marked "DOT-SP 7026" in place of "DOT-4DS".

§ 178.47(a) Service pressure not to be over 1,400 psi.

§ 178.47(b) Type ARMC0 21-6-9 stainless steel authorized with proper welding procedure complying with the analysis documented on page 4 of petitioner's letter dated November 22, 1974.

§ 178.47(f) Wall stress at the minimum specified test pressure must not be over 90,000 psi.

§ 178.47(g) Heat treatment. Welded cylinder must be stress relieved at a temperature of 900°F ± 25°F after process treatment and before hydrostatic test.

§ 178.47(h)(2)(iii) Add: Cylinders with marked service pressure greater than 900 psi must have straight threads having at least 6 engaged threads to have tight fit, and calculated shear strength at least ten times the test pressure of the cylinder, gaskets required, adequate to prevent leakage.

§ 178.47(q) Add: The elastic expansion in cubic centimeters must be marked to the nearest 1 percent near the test date.

November 27, 2018

b. TESTING: In addition to the testing required under § 178.47, cyclic pressurization testing must be performed on certain containers as follows:

Prior to initial shipment of any specific cylinder design having a service pressure exceeding 900 psi or having a wall stress at test pressure exceeding 75,000 psi or both, a cyclic pressurization test must be performed on at least one representative sample without failure to 10,000 cycles. Pressurization shall be performed hydrostatically between approximately zero psig and the service pressure, at a rate not in excess of 10 cycles per minute. The cylinder used in the cycle pressurization test may be used for the burst test required under § 178.47(1). Additional tests shall be repeated on one random sample out of each lot of cylinders. All cylinders used in cycling tests must be destroyed.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

November 27, 2018

- f. The cylinder must be shipped in strong outside packaging in accordance with § 173.301(a)(9).
- g. Each cylinder must be retested and requalified every five years in accordance with § 180.209 as prescribed for DOT 4DS cylinders. A cylinder must be condemned if the elastic expansion exceeds the original elastic expansion by more than 5 percent, or if the permanent expansion to total expansion ratio exceeds 10 per cent.
- h. Transportation of oxygen is only authorized when in accordance with § 175.501.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo aircraft only, and passenger-carrying aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper shall furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR § 171.15 - Immediate notice of certain hazardous materials incidents, and § 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: KFW/SG/kah